UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,079	01/21/2005	Robert J. Lowles	555255012475	5833

7590	07/30/2007
John V Biernacki	
Jones Day	
North Point	
901 Lakeside Avenue	
Cleveland, OH 44114	

EXAMINER
PARDO, THUY N

ART UNIT	PAPER NUMBER
2165	

MAIL DATE	DELIVERY MODE
07/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

		Application No.	Applicant(s)
Office Action Summary		10/522,079	LOWLES ET AL.
		Examiner	**Art Unit**	
		Thuy N. Pardo	2165	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 July 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-70</u> is/are pending in the application.

    4a) Of the above claim(s) <u>29-70</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-28</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>21 January 2005</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/21/2005</u>.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Applicant's Response to Election/Restriction requirement filed on July 06, 2007 has been

reviewed. Group I including claims 1-28 has bee elected, without traverse. Claims 29-70 have

been withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

2.   Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al.

(hereinafter "Nelson") US Patent No. 5,937,422 as applied to claims 1-28 above, and further in

view of de Campos US patent No. 6,272,456.

Referring to claim 1, Nelson teaches a method of building a custom word list for use in

text operations, comprising the steps of:

scanning a collection of text items to identify words in the text items ["input text = DOG,

WOLF", see fig. 4; each word in the document is stemmed to its root form, col. 5, lines 41-51];

assigning a weighting to each identified word [each word in the input text is given an

input-word score, col. 5, lines 52-55; the words in the final word list are ranked in order

according to a final word score, col. 7, lines 24-26; fig. 3]; and

storing [inherent in the system when it performs this method for each document in a

database, col. 8, lines 45-47] each identified word and its corresponding weighting [fig. 6; col. 8,

lines 15-47].

However, Nelson does not explicitly teach generating these functions on the electronic

device although it has the same functionality of creating a word list score to each input words of

the input text [see the abstract of Nelson]. De Campos teaches scoring the longest match for each

language based on a frequency parameter (i.e., key words) identified within a text sample input

on an electronic device (i.e., hand-held devices) [see the abstract; col. 3, lines 4-30; col. 8, lines

39 to col. 9, lines 21].

Therefore, it would have been obvious to one of ordinary skill in the Data Processing art

at the time of the invention to have modified the communication service system of Nelson

wherein the building for the word list based on the score to each input by incorporating the

teachings of De Campos especially the technique for scoring the longest match for each language

based on a frequency parameter (i.e., key words) identified within a text sample input on an

electronic device; the motivation being to expand and enhance the versatility of Nelson's system

by generating these functions on the electronic device as an essential means to increase the

flexibility and functionality of performing tasks by remote processing devices.

Referring to claim 2, Nelson and De Campos teach the invention substantially as claimed.

De Campos further teaches that the collection of text items comprises text items stored at a

computer system [col. 8, lines 26-44].

Referring to claim 3, Nelson and De Campos teach the invention substantially as claimed.

De Campos further teaches that the collection of text items comprises at least one type of text

item selected from the group consisting of: sent messages, documents, acronym lists, and

existing word lists [collection of unique words in a document, col. 27-38].

Referring to claim 4, Nelson and De Campos teach the invention substantially as claimed.

Nelson further teaches that the step of assigning a weighting comprises the step of: calculating a

frequency of occurrence of each identified word [col. 6, lines 2-20].

Referring to claim 5, Nelson and De Campos teach the invention substantially as claimed.

Nelson further teaches determining a number of occurrences of each identified word in the

collection of text items; identifying a maximum number of occurrences and calculating a

frequency of occurrence of each identified word based on a number of occurrences of the

identified word and the maximum number of occurrences [col. 6, lines 44-63].

Referring to claim 6, Nelson and De Campos teach the invention substantially as claimed.

Nelson further teaches adjusting the weighting of an identified word when the word is used in

text operations on the electronic device [col. 2, lines 62-67].

Referring to claim 7, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches that determining a source of each text item in the collection of text items, wherein the step of assigning a weighting comprises the step of calculating the weighting for each identified word based on the source of the text item in which the word was identified [ab; col. 15, lines 67 to col. 16, lines 8].

Referring to claim 8, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches that text item sources include a user text item source and an external text item source, and wherein text items from the user text item source are assigned a higher weighting than text items from the external text item source [col. 4, lines 5-15; col. 4, lines 66 to col. 5, lines 15].

Referring to claim 9, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches categorizing the identified words into categories; and storing an indicator of the category of each identified word with the word and corresponding weighting [see table 2 in col. 21].

Referring to claim 10, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches that the categories are selected from the group consisting of: address, name, hyperlink, recurring word grouping, different language categories, and user added words [different language categories, col. 19, lines 11-24; table 1 in col. 20].

Referring to claim 11, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches that the collection of text items comprises an existing word list having words and predefined weightings; the step of assigning comprises the step of converting the predefined weightings into converted weightings for each word in the existing word list and the step of storing comprises the step of storing each word in the existing word list and its corresponding converted weighting [converting "unique input word list" to "tree-word list" corresponding converted weighting, fig. 2-3].

Referring to claim 12, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches normalizing the predefined weightings [normalized score based on the log of a score within a range of numbers zero to 255, col. 19, lines 37 to col. 20, lines 7].

Referring to claim 13, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches applying a predetermined weighting factor to the predefined weightings [col. 17, lines 51-65; col. 18, lines 58-67; col. 31, lines 1-4].

Referring to claim 14, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches integrating each identified word and its corresponding weighting and an existing word list having words and predefined weightings [col. 17, lines 51-65; col. 18, lines 58-67; col. 31, lines 1-4].

Referring to claim 15, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches converting the weighting of each identified word into a converted weighting.

Referring to claim 16, Nelson and De Campos teach the invention substantially as claimed. Nelson further teaches converting the predefined weightings into converted weightings [see fig. 4; col. 7, lines 37 to col. 8, lines 11].

Referring to claim 17, Nelson and De Campos teach the invention substantially as claimed. Nelson further teaches that the step of integrating comprises the step of converting the weighting of each identified word and the predefined weighting of each word in the existing word list into a converted weighting [see fig. 4; col. 7, lines 37 to col. 8, lines 11].

Referring to claim 18, Nelson and De Campos teach the invention substantially as claimed. Nelson further teaches determining whether any of the identified words occur in the existing word list; and assigning a resolved weighting to identified words that occur in the existing word list [fig. 5-6; col. 6, lines 35-62].

Referring to claim 19, Nelson and De Campos teach the invention substantially as claimed. Nelson further teaches that the resolved weighting is the weighting of the identified word [fig. 5-6; col. 6, lines 35-62].

Referring to claim 20, Nelson and De Campos teach the invention substantially as

claimed. Nelson further teaches that the resolved weighting is based on the weighting of the

identified word and the predefined weighting of the identified word in the existing word list [fig.

5-6; col. 6, lines 35-62].

Referring to claim 21, Nelson and De Campos teach the invention substantially as

claimed. De Campos further teaches receiving a selection input from the user to select text items

to be included in the collection of text items [profile of complete words, ab].

Referring to claim 22, Nelson and De Campos teach the invention substantially as

claimed. De Campos further teaches mapping each identified word to a keystroke sequence on

the electronic device and storing the identified words and corresponding weightings and

keystroke sequences at the electronic device [letter sequences, ab; col. 27 to col. 2, lines 18; col.

2, lines 50 to col. 3, lines 14].

Referring to claim 23, Nelson and De Campos teach the invention substantially as

claimed. De Campos further teaches mapping the user input word to a keystroke sequence on the

electronic device [letter sequences, ab; col. 27 to col. 2, lines 18; col. 2, lines 50 to col. 3, lines

14] and transferring the user input word to the computer system [col. 8, lines 39-44].

Referring to claim 24, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches a first data store and a second data store [local and remote memory storage devices, col. 8, lines 38-44].

Referring to claim 25, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches that the second data store is implemented in a single memory component.

Referring to claim 26, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches that the first data store comprises storage areas in a plurality of memory components [22 of fig. 1].

Referring to claim 27, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches a keyboard mapper [40 of fig. 1] for mapping each identified word to a keystroke sequence on the electronic device [handheld device, col. 8, lines 34-39].

Referring to claim 28, Nelson and De Campos teach the invention substantially as claimed. De Campos further teaches a word list loader at the electronic device configured to receive the identified words and their corresponding weightings from the second data store and to store the identified words and their corresponding weightings at the electronic device [located in both local and remote memory storage devices, col. 8, lines 39-44].

3.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thuy N. Pardo whose telephone number is 571-272-4082. The

examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 13, 2007

THUY PARDO
PRIMARY EXAMINER